

Product	Model and resolution	Atmospheric forcing	Data assimilation	Assimilated observations	Initial conditions
ORCA025	NEMO3.2–LIM2, 1/4°, 46 $z$ levels	6-hourly ERA-Interim	None	None	1/4° run with hydrographic data assimilation
ORCA0083	NEMO3.2–LIM2, 1/12°, 75 $z$ levels	6-hourly DFS4.1 (1978–2007) and 5.1 (2008–2010)	None	None	Levitus (1998) $T/S$ climatology
ORAP5	NEMO3.4.1–LIM2, 1/4°, 75 $z$ levels	6-hourly ERA-Interim with wave forcing	NEMOVAR (3D-Var) (Mogensen et al., 2012)	OSTIA SST, AVISO SLA, in situ $T/S$ profiles from EN3_v2 with bias correction for XBT, OSTIA sea ice concentration	12-year spin-up initialised from WOA09 $T/S$ climatology and followed by 5-year assimilation run
CGLORSV5	NEMO3.2.1–LIM2, 1/4°, 50 $z$ levels	3-hourly ERA-Interim	Global OceanVar (3D-Var) (Storto et al., 2011)	Reynolds 1/4° AVHRR + AMSR-E SST, AVISO SLA, in situ $T/S$ profiles from EN3_v2 with bias correction for XBT, NSIDC (“NASA Team” algorithm) sea ice concentration	Mean January condition of a 4-year spin-up initialised from EN4 $T/S$ analysis
UR025.4	NEMO3.2–LIM2, 1/4°, 75 $z$ levels	6-hourly ERA-Interim	Met Office FOAM–NEMO assimilation system (optimal interpolation) (Storkey et al., 2010)	ICoads in situ SST and NODC satellite SST, AVISO SLA, in situ $T/S$ profiles from EN3_v2 with bias correction for XBT, EU-METSAT OSISAF sea ice concentration	EN3 $T/S$ analysis
GLORYS2V4	NEMO3.1–LIM2, 1/4°, 75 $z$ levels	3-hourly ERA-Interim with RF and $P$ corrections	SAM2 (singular evolutive extended Kalman filter) (Pham et al., 1998)	Reynolds 1/4° AVHRR-only SST, AVISO SLA, in situ $T/S$ profiles from Coriolis CORA4.1 database, CERSAT sea ice concentration	EN4 $T/S$ analysis